



PIER Energy System Integration Program Area

Center for the Study of Electricity Markets

Contract #: PIR-00S-001

Contractor: University of California, Energy Institute; Center for the Study of Energy Markets

Contract Amount: \$2,050,000

Match Amount: \$200,000

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Status: Active

Project Description:

The purpose of the grant agreement is for University of California Energy Institute (UCEI) to operate a Center for the Study of Energy Markets (CSEM) to undertake market performance research. Tasks to be performed by the CSEM are divided into 5 categories relating to program management, the performance of research, and the presentation and transfer of research results. CSEM will contribute a diverse array of products useful to decision-makers and the market alike.

The central mission of CSEM is for UCEI staff, UC professors and students, and visiting professors to produce high quality research on the design, performance, and analysis of energy markets. The thrust of CSEM research will be towards more basic research in these areas. Research at CSEM will focus on developing new tools and strategies for the analysis of electricity markets.

Over the period of the grant, CSEM will conduct research in five areas:

1. The reliability in a market-based industry structure.
2. The interaction of demand response and market competitiveness, the political economy of distribution/retail rate structures, and the feasibility and impact of various proposals for providing customer response.
3. The development of tools to analyze the impact of market design on the ability of firms to exercise market power and the ability of decentralized market activities.
4. Systematic analyses of both the benefits and consequences of the various tools for mitigating market power that have been proposed or adopted in electricity markets around the world.
5. Interactions between electricity markets and environmental regulation.

This project supports the PIER Program objective of:

- Improving the energy cost/value of California's electricity system by providing assessments of major market structure and performance issues that are a key part of the macro environment influencing the commercialization and adoption of energy technologies.

Proposed Outcome:

1. Conduct high quality research on the design, performance, and analysis of energy markets.

Project Status:

The grant has been operating for about 30 months. The grant is functioning about as intended, with a number of short-term visiting and permanent personnel developing research papers, making presentations at research conferences, and preparing policy overview papers. These were “published” on the UCEI website under the CSEM Working Paper Series. The core UCEI personnel have conducted a number of outreach activities – multi-day training courses, policy conferences, and are laying the ground work for a newsletter.

The following has taken place:

- 15 research papers have been posted to the CSEM Working Paper website since January 2003: www.ucei.berkeley.edu/pubs-csemwp.html
- March 2004 Workshop.